



Model Flooding Solutions Worksheet

This worksheet is intended to help you plan for and summarize your flood modelling project with your students. We encourage creativity, and recognize that you know what's best for your class- feel free to change, adjust, or take charge of the flow of your project! You are welcome to fill this worksheet in and submit it with your challenge, or, submit your project summary in any other format you would like (for example in another written form, video, Google Slide, etc).

Planning for your modelling project

We suggest you structure the modelling project with the following general steps. The Learner Worksheet is structured around this set-up, and may help you assess learner understanding of the project.

1. Brainstorm/ID Flooding Areas

- a) For local projects, consider a nature walk, group discussion, or even a Flood Mapping Tour
<https://programs.greenlearning.ca/course/flooding-mapping-tour>
- b) For global (or theoretical) flooding, consider a library or tech day researching historical floods, or community responses to regular flooding (ex. monsoon season).

2. 2D Planning

- a) Consider working collaboratively as a whole group, or separating learners into groups or pairs for this step
- b) For your learners, clarify whether a whole community or a small area is being modelled, and what your expectations are for "testing" the flooding solutions (does the solution need to be tested multiple times, does the "before" model need to be measured in some way, etc.).

3. 3D Modelling and Testing

- a) We encourage you to collect recycled materials in the lead up to this project. Consider identifying helpful materials with your students early on in the project for them to bring to school (save from lunches, repurpose from recycling bins, etc.)

4. Reflection (*learner worksheet and following pages*)



Model Flooding Solutions Worksheet

Summarize your modelling project

Let us know how things went! Explain all the steps involved in completing the project, all the people involved in the project, and the time it took to complete the project. Make sure to attach photos and videos to your submission!



Model Flooding Solutions Worksheet

Summarize the impacts and key learning from your modelling action project

Tell us what you learned! What challenges did you encounter, and what did you try to do to overcome these challenges? What made a flooding solution successful, on a model scale? Were there any options that might be possible to implement in real life? What were the key takeaways your group learned from this project?